DOCUMENT RESUME

ED 108 148 CS 001 916

TITLE	Title I Reading Center Program.
INSTITUTION	Broward County Schools, Fort Lauderdale, Fla.
SPONS AGENCY	Office of Education (DHEW), Washington, D.C.
PUB DATE	74
NOTE	10p.
EDRS PRICE	MF-$0.76 HC-$1.58 PLUS POSTAGE
DESCRIPTORS	*Effective Teaching; Elementary Education; Individualized Reading; Reading Comprehension; *Reading Instruction; *Reading Programs; Reading Skills; *Remedial Reading Programs; Vocabulary Development
IDENTIFIERS	Effective Reading Programs; Elementary Secondary Education Act Title I; ESEA Title I; *Exemplary Reading Programs; Right to Read

ABSTRACT

One of the twelve exemplary reading programs summarized in the Introduction to Right to Read's "Effective Reading Programs: Summaries of 222 Selected Programs" (CS001934), this program uses a variety of cross-referenced materials and small group instruction to develop students' reading skills, vocabulary, and reading comprehension. Students from low-income families who are functioning approximately two years below grade level in reading in grades one through six come to the reading center for one hour of instruction every other day. Based on the results of diagnostic tests, teachers prescribe an individualized program of learning and reinforcement activities for each child. A child spends part of each hour receiving direct instruction from a teacher in skills development and the remainder of the hour in reinforcement activities under the supervision of an aide. Incorporated into the program is ongoing inservice training. (TO/AIR)

****
* Documents acquired by ERIC include many informal unpublished *
* materials not available from other sources. ERIC makes every effort *
* to obtain the best copy available. nevertheless, items of marginal *
* reproducibility are often encountered and this affects the quality *
* of the microfiche and hardcopy reproductions ERIC makes available *
* via the ERIC Document Reproduction Service (EDRS). EDRS is not *
* responsible for the quality of the original document. Reproductions *
* supplied by EDRS are the best that can be made from the original. *
****

ED108148

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

PROGRAM AREA: Reading/Disadvantaged

PROJECT TITLE: Title I Reading Center Program

LOCATION: Ft. Lauderdale, Broward County, Florida

SOURCES AND LEVEL OF FUNDING: 100% Federal ESEA funds $700,000

PROGRAM START DATE: 1966

BRIEF DESCRIPTION OF PROJECT:

Goals and objectives. Using a variety of very organized, cross-referenced materials, and small group instruction, the teachers in the Reading Center Program develop the students' reading skills, vocabulary, and reading comprehension.

Context. All the children in the Reading Center Program come from Title I schools. Approximately 75% of the participants are black, 15% are white, and 10% are Puerto Rican. Children come from disadvantaged neighborhoods and are very low achievers in school. One part of the program operates in a school that has a high migrant population, and because of this, this locale has high attrition.

All elementary children in all Title I schools take the CTBS. First graders take a readiness test. Those who are functioning at least two years below their actual grade level in reading achievement are selected for the program to receive remediation. Then the child takes a battery of diagnostic tests. An individualized educational prescription is written for each child, based on the results of these tests.

Program Description.

Years of operation, size, grade levels. The Reading Center Program is in its seventh year of operation. This year (1973-74), there are about 2,160 children enrolled, from grades 1-6.

Staffing, preservice/inservice training. Staff members directly involved with the reading program are the following: a supervisor who coordinates the whole program; an assistant supervisor; a clinician who does the testing, compiles evaluative data, and provides in-depth case studies for special children; 41 teachers; and 18 teacher aides. Support personnel are one secretary, two clerk-typists, one custodian and one maid for the Reading Center, and five bus drivers.

All staff participate in a preservice training session for about two weeks at the beginning of each school year. There, they are introduced to new materials or new teaching methods to use during the up-coming year. Other topics address possible shifts in program focus or a new population characteristic that will have to be considered. Administrative concerns are also covered during this time. New staff members receive an in-depth slide and tape orientation to the philosophy, structure, and specific workings of the reading program.

Incorporated into the program is ongoing inservice training. The teaching staff is teamed into small groups of either two or three teachers and an aide. Each team meets informally during the week to discuss problems and progress of their children. They also make necessary changes in the educational prescriptions. In addition to these informal sessions, there

CS 001 916

are about eight planned meetings each year. Discussions at these meetings center around such specific topics as behavior problems and how to deal with them, and specific characteristics of slow learners.

Facilities, time involved. The Reading Center program operates in eight different sites. The Reading Clinic, a building constructed especially for this program, opened in the spring of 1967. A large room with six glass-enclosed teaching areas and an open space between the enclosures was recently added to the existing facilities of 11 small teaching rooms and a room large enough to accomodate four tables for small group work. Approximately 800 children come to the main Reading Clinic from 12 schools. These children are bussed to and from their own schools and the Reading Clinic.

Throughout Broward County, there are five sub-centers located in 42' carpeted trailers. The trailers are divided into three areas--two for teaching and one for testing. A total of about 860 children from 17 schools ride mini-busses from their schools to the sub-centers and back again. The other locales are in two schools, one in a hallway and the other in a classroom. A total of about 500 children utilize the facilities and come from these two schools only. The furniture is arranged in the hallway and the classroom to create work space for small groups. Each center is equipped with complete sets of materials, which will be discussed in the following section.

Because there are so many children in this program, the staff has adopted an alternate-day schedule. A child attends his assigned center three alternating days one week and two alternating days the next week for an hour each day. This schedule results in an average of five hours of reading instruction every two weeks. In order to handle the needs of all these children, the reading centers are open all day. Every effort is made to schedule all children from one school who ride a bus to come at the same time to their center. This minimizes confusion at their own school.

Curricula, material. Every child picks up his own prescription at the beginning of the hour and carries it with him to each work area. The prescription tells him exactly which materials he should be working on each day. Each hour of instruction is divided into three sessions--the skills program, phonics and comprehension reinforcement, and reading. Typically, a child spends between 20 and 30 minutes on the skills program, receiving intensive instruction from the teacher in a very small group. He spends the remainder of the hour working on phonics and comprehension reinforcement and reading, supervised by the aide. The skills program consists of three levels of reading skills. Level 1 teaches initial consonants, short vowel sounds, blending, and word recognition. Level 2 continues with long vowel sounds and vowel pairs. Finally, Level 3 deals with syllabication. The materials used for teaching these skills are commercial (15-20 publishers). The teachers have taken these materials apart and laminated each sheet, which is labeled with an appropriate level and page number. This affords a great deal of variety, as well as permitting several children to work from the same book at the same time.

Each teacher is assigned 50 children, but because of the scheduling, she teaches specific reading skills to no more than 3 children at a time, while the aide supervises the other children in reinforcement lessons and reading. The aide is also responsible for moving children from one activity to another. Materials that the children use to reinforce their reading skills are commerically available workbooks and work-texts. These have also been pulled apart and laminated. They are sequentially arranged

and labeled accordingly. Slide and tape programs are available for practice in auditory discrimination. The reading component utilizes a basal reading program consisting of library books and special materials for remedial readers, which allow a child to begin to read even if he only knows the sounds of a few letters. The basal reading program is similar to the one used in the public schools.

A child may begin at any place on his prescription, although the teacher may choose to begin his hour with skills instruction. When a child successfully completes each item on his prescription, he receives immediate reinforcement from the teacher or aide, who initials the task just completed. Often the teacher will conduct an oral review of a certain level to make sure that the child really understands the work he is doing. If a child completes his work in less than an hour, he may either start working on new materials or he may play with other toys, such as records or books, until the bus takes him back to school. Although most children achieve their actual grade level in reading after about seven months in a reading center, they usually stay in the program for the whole school year. Program staff believe that this additional exposure helps the children retain the skills they have just mastered.

A reference book catalogues all materials relating to each skill level. For instance, if a child needs work with consonant blending, the teacher need only find the appropriate page in the reference book that refers to consonant blending. On that page are listed all skills, reinforcement, and reading materials that teach this particular skill. She decides which materials will interest the child and records their level and number on his prescription. This careful organization gives someone unfamiliar with the system a quick, easy way to find appropriate materials.

Parental involvement. All parents receive letters asking them to come to the center to watch their children learn to read. Several parents usually come at a specific time, and the director spends a few minutes explaining the program to them before they observe the activities. The program staff has also made a film of the children working. Many parents attend Parent Night activities and view the film.

Cost. The total cost for this program is about $700,000. Per pupil cost is about $250, as compared with a district per pupil cost of about $900. The estimated cost of instructional materials is between $6,000 and $8,000 annually. The total initial investment in 1966 was $108,000; there were 450 children served that year.

EVIDENCE OF EFFECTIVENESS:

Evaluation conducted by. The Research Department of the School Board of Broward County, Florida; contact has been with Dr. Linda Murray, Evaluation Analyst.

Sample size and method. The Reading Center program in Broward County has been the subject of the Research Department's evaluations since 1967. Therefore, there is no single study that will be reported herein, but rather reports of several studies that are pertinent either to the evaluation of the Reading Center or to important questions regarding its effect on pupils.

1. A 1967-68 study reported on the effectiveness of the Reading Center for pupils at 4th grade level. Fifteen (15) schools with a high proportion of disadvantaged pupils were served by five mobile Reading Center units; services were provided in twelve-week blocks.

a. Sample. 4th grade students were drawn from 10 elementary schools served by the five Reading Centers. Students selected had to show average IQ on the Otis Quick Scoring Test of Mental Ability and had to be approximately one grade equivalent level or more behind in reading skills measured by the Gray Oral Reading Test.

b. Measures. The Otis QS and the Gray Oral were administered in November 1967 in order to select students. The Gates-MacGinitie Primary B Form 1 was administered in December 1967 and in June 1968; the Gates-MacGinitie Primary B Form 2 in March 1968.

Test	Administered			
	November 1967[a]	December 1967	March 1968	June 1968
Otis QS	X			
Gray Oral	X			X (different f
Gates-MacGinitie		Primary B, Form 1	Primary B, Form 2	Primary B, For

The Gray Oral pre- and posttests were administered by teachers; the Otis QS and Gates-MacGinitie tests were administered by staff of the Research Department. Grade equivalent scores are reported.

c. Comparison methods. Of the 10 schools supplying 4th grade students, 5 were experimental and 5 were control for the first 12-week treatment period from December to March; these two groups of schools switched from experimental to control and vice versa for the second treatment period from March to June. Grade equivalent gain scores are reported for the experimental and control groups at the end of each 12-week treatment period. Table 1 below summarizes the testing results. The 5 Group A schools were experimental (serviced by the Reading Center) for the December-March period but not during the March-June period

The 5 Group B schools were experimental during the March-June period but not during the December-March period.

Table 1

Results of Experimental-Control School Testing in 1967-68

Test Schools	N	Dec.	Mar.	June	Gains Dec-Mar	Gains Mar-June	Gains Dec-June
Gray Oral							
Group A	104	3.25	2.96	3.00	0.71)*	0.04)*	0.75
Group B	87	2.00	2.23	2.70	0.23)*	0.47)*	0.70
Vocab: Gates							
Group A	93	2.77	3.05	3.33	0.28)ns	0.28)ns	0.56
Group B	81	2.28	2.58	2.70	0.30)ns	0.20)ns	0.50
Comp: Gates							
Group A	93	2.80	3.24	3.08	0.44)*	-0.16)*	0.28
Group B	81	2.45	2.58	2.84	0.13)*	0.26)*	0.39

*Difference in gains significant at <.001 level.

d. Results. During the first 12-week from December to March, the experimental schools showed gains on the Gray Oral and the Gates Comprehension that were significantly higher ($p < .001$) than gains for the control schools. During the second treatment period from March to June, when Group A and B schools switched to control and experimental conditions, again the gains significantly favored ($p < .001$) the experimental schools on both the Gray Oral and the Gates Comprehension. There were no significant mean gain differences found for either group at either treatment period on the Gates Vocabulary.

2. In 1968-69, a study of the retention of improved gains resulting from enrollment in the Reading Center was conducted by the Research Department.

a. Subjects. 47 fourth-grade enrollees at the Reading Center participated as the experimental group. A second group of 48 fourth-grade students with similar IQ scores and identified as needing remedial reading instruction served as controls.

b. Measures. Each subject was administered different versions of the Gates Word Recognition and Gates Paragraph Reading as pre- and posttests. The length of the treatment (enrollment in the reading center) was 7½ months. One year after leaving the Reading Center, all fifth graders were administered the Comprehensive Tests of Basic Skills (CTBS); CTBS vocabulary and comprehensive scores were obtained for 37 experimental and 41 control students.

c. Comparison methods. For both the word recognition and paragraph reading scales, the mean Gates posttest score, adjusted for Gates pretest score, was compared for the experimental and control groups. Also, the mean vocabulary and comprehensive scores of the CTBS, adjusted for Gates pretest score on

word recognition and paragraph reading, respectively, were tabulated.

d. Results.

Group	N	Average Otis IQ	Gates Word Recog. PRE	Gates Word Recog. ADJ.POST[a]	Gates Paragraph PRE	Gates Paragraph ADJ.POST[a]
Experimental	47	94	2.9	4.3)*	2.9	4.1)*
Control	48	91	3.3	3.4)*	3.5	3.2)*

[a]Adjusted for pretest; test retest interval was 7½ months.
*p <.001

Group	N	Average Otis IQ	Vocabulary Gates Pre	Vocabulary CTBS Post[a]	Comprehension Gates Pre	Comprehension CTBS Post[a]
Experimental	37	94	2.9	4.3)*	2.9	4.2)*
Control	41	90	3.3	3.2)*	3.4	3.1)*

[a]Adjusted for pretest; test retest interval was one year, 7½ months.
*p <.001

3. Data for the 1969-70 academic year were collected in a pilot study to examine the relationship between pre- and posttest gain and the amount of time spent in the Reading Center program.

a. Subjects. Data were available for 171 third graders enrolled in the Reading Center for varying amounts of remediation. Enrollees spent approximately 1½ hours per day in the Reading Center. Average Otis QS was 95.

b. Measures. Three test administrations were scheduled: (i) Gates-MacGinitie Primary B, Form 1 administered as a pretest, (ii) Gates-MacGinitie Primary B, Form 2 administered as a posttest at discharge from the Reading Center, (iii) Gates-MacGinitie Primary B, Form 1 administered as a "retention" measure one month after dismissal from the Reading Center.

c. Design. Pupils were grouped into four categories based upon number of total hours of Reading Center remedial instruction.

d. Results. The table below indicates average pre- posttest gains and pre- retention test gains on vocabulary and comprehension for the various categories of remediation:

Time in Center (hours)	Mean IQ	Mean Voc. Gain Pre-Post	Mean Voc. Gain Pre-Retention	Mean Voc. Gain Pre-Post	Mean Voc. Gain Pre-Retention
36-67	99	.69	1.01	1.03	1.49
68-99	96	.70	.87	1.12	1.14
100-131	94	1.27	1.23	1.25	1.09
132-163	92	1.30	1.15	1.56	1.29

There were significant mean differences in pre-test and IQ scores among the four groups. The possibility of increasingly large regression effects (at least for pre- posttest gains) exists. Finally, loss from posttest to retention test appears highest for the lower IQ category.

4. In a fourth study to be reported, pre- posttest gain scores were examined for groups of second-graders for two separate years (1970-71 and 1971-72) who spent varying amounts of time, ranging from 2 to 6 months, in the Reading Center.

a. Subjects. 491 second graders enrolled in the Reading Center either in 1970-71 or 1971-72, for varying amounts of time.

b. Measures. Different forms of the Gates-MacGinitie Advance Primary Reading Tests were administered by the Reading Center personnel as pre- and as posttests. Two scores are reported--vocabulary and comprehension.

c. Design. Pupils in both years enrolled in the Reading Center for either 2 or 4 months were studied; pre-, posttest, and gain scores are shown below.

Months in Center	Year Enrolled	Vocabulary			Comprehension		
		Pre-	Post-	Gain	Pre-	Post-	Gain
2	70-71	1.85	2.25	.40	1.64	2.02	.38
2	71-72	1.82	2.26	.44	1.63	2.07	.44
4	70-71	1.75	2.73	.98	1.68	2.67	.99
4	71-72	1.80	2.65	.85	1.62	2.71	1.09

When posttest scores were adjusted for pretest scores, there was found no interaction of Year Enrolled x Months in Center and no Year Enrolled main effect. This difference in mean adjusted posttest scores was constant between the 2 and 4 month groups for each year's group. It was concluded that years could be collapsed, and a single table combining additional data was presented.

Months in Center	N	Gain		Adjusted Posttest Means	
		Voc.	Comp.	Voc.	Comp.
2	163	.43	.42	2.23	2.04
3	49	.57	.68	2.39	2.37
4	152	.90	1.06	2.69	2.70
5	39	1.26	1.18	3.09	2.88
6	88	1.40	1.65	3.17	3.33

Adjusted posttest means were significantly different among the 5 categories of pupils classified according to months spent in the Reading Center. It was concluded that there seemed to be no point of plateau for the curve of gain in months in the center.

5. The strongest study was conducted in 1972-73. All third year pupils were screened for attendance at the Reading Center. From this list of eligible pupils, strict random sampling procedures were used to select pupils for the analysis: 120 were selected as the experimental group; 60 as a control group. This procedure serves to equalize regression effects in the experimental and control groups simultaneously. Also it is noted that the control group's entry to the program was delayed until May and not denied, since they were eligible for admission to the Reading Center. A third "control" group, admittedly non-randomly selected, was obtained from 7 non-Title I schools.

a. Subjects. Experimental: N=120 third graders - randomly selected from eligibles
Control: N=60 third graders
"Control": N=120 (not randomly assigned)

b. Measures. Otis IQ, Gates Advanced Primary Vocabulary and Comprehension. The duration of the enrollment of the experimental group in the Reading Center was from September to January. Tests were administered at these two times (pre- and post-) as well as in May to examine the retention of gains.

c. Comparison method. Three September pretest covariates were used to adjust criterion scores in January (posttest) and May (retention test). An analysis of covariance design then was applied using six groups: the experimental, control, "control" treatments by race (black, white). The following hypotheses were tested: (i) Equality of regression of criteria on the three covariates. Accepted at alpha = .05 for both the January and May testings. (ii) Interaction of Treatment by Race. No significant interaction at alpha = .05 for either the January or May testings. (iii) Treatment effects for both the adjusted January and May testing were significant ($p < .001$).

d. Summary. The tables below show first pre-, post-, and retention test mean grade equivalents for the three treatment groups and second, the adjusted mean gains from pretest-to-posttest and pretest-to-retention test for the three treatment groups.

Group	N	IQ	SEPT Voc	SEPT Comp	JAN Voc	JAN Comp	MAY Voc	MAY Comp	RETENTION (N)
Control	59	97	2.22	1.87	2.68	2.55	3.03	2.67	(58)
"Control"	115	96	1.82	1.72	2.16	1.98	2.50	2.10	(116)
Experimental	107	97	2.01	1.83	2.95	3.03	3.22	3.05	(107)

Group	SEPT-JAN GAIN Voc	SEPT-JAN GAIN Comp	SEPT-MAY GAIN Voc	SEPT-MAY GAIN Comp
Control	.46	.68	.81	.80
"Control"	.34	.26	.68	.38
Experimental	.94	1.20	1.21	1.22

e. Conclusions. Significant adjusted mean gain differences favored the experimental groups over both control groups at both the January and May testings.

These series of studies reflect a progressive and continuing monitoring of the effects of the Reading Center over a several year period. Experimental-control comparisons showed significant differences in achievement in favor of students enrolled in the Reading Center. Furthermore, the relationship of "duration of treatment" or time spent in remediation to achievement gain were estimated. The final study reported is to be commended on its attempt to control for regression effects through random allocation of eligible Reading Center enrollees to the experimental and control conditions and on its use of a fairly sophisticated technique to supply answers to basic questions in a clear and concise manner.